#### 昭和57 — 公開実用 6296



### 実用新案登録願(8)

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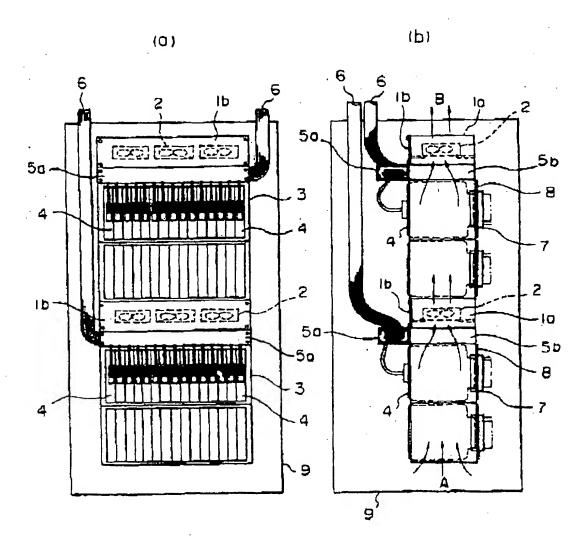
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## 第 | 図



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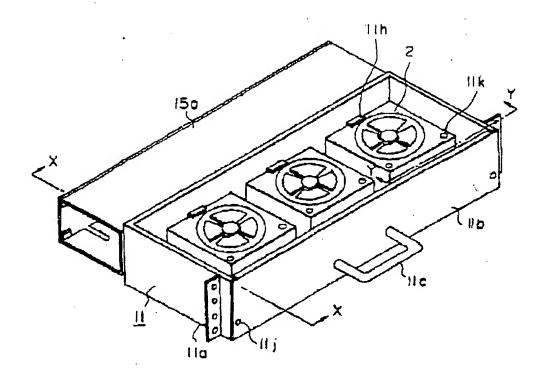
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# 第3図



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实用有案及企业以 种電気工業株式会社 代理人 鈴木 敏明 (19) Patent Office of Japan (JP)

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(54) Title of the Innovation\*: STRUCTURE OF AN EXHAUST-TYPE FAN UNIT

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(57) Claims

A structure of an exhaust-type fan unit 11 intended for positively cooling an electronic device, said fan unit having an air-intake port located in the lower part of the electronic device housing 9, an air-discharge port in the upper part of said housing, and an air-flow duct formed in the upper part of the housing for guiding the air flow and for removal of heat, said structure being characterized by comprising: an upper guide rail 11d and a lower guide rail 1e installed on both side walls inside the fan unit housing 11a; a fan mounting plate 1b arranged between said guides with a sliding fit; a stopper 11f rigidly installed in a fixed position on the lower guide rail and having a construction that allows its withdrawing towards the rear side of the fan unit housing 11a; and a disconnectable cable duct 15a attached to the front side of said fan unit housing 11a.

### Brief Description of the Drawings

Fig. 1 is a view of the known positive-cooling system for an electronic unit, where Fig. la is a front view, and Fig.1b is a side view. Fig. 2 is a view of the positive-cooling system for an electronic unit according to the present innovation, where Fig. 2a is a front

<sup>\*</sup>The terms "innovator" and "innovation" are used instead of "inventor" and "invention" to emphasize that this document is a Utility Model and not a Utility Patent (translator's note)

view, and Fig.2b is a side view. Fig. 3 is a three-dimensional view of the fan-unit of the innovation. Fig. 4 is a sectional view along the line X-X of Fig. 3. Fig. 5 is a sectional view along the line Y-Y of Fig. 3.

1a – fan unit housing; 1b – fan unit cover; 2 – fan; 3 – shelf; 4 – printed circuit board; 5a – cable duct; 5b – cable duct support frame; 6 – cable with a connector; 7 – back-side connector; 8 – wiring plate; 9 – housing; 11 – fan unit; 11a – fan unit housing; 11b – fan mounting plate; 11c – handle; 11d – upper guide rail; 11e – lower guide rail; 11f – stopper; 11g – fixing element; 11h – fan clamping device; 11j, 11k – screws; 15a – cable duct; 15b – screw.

Fig. 4

